Appendix A

nop	IGNORE_OPCODE
aconst_null	OP_PUSHB
iconst_ml	OP_PUSHB
iconst_0	OP_PUSHB
iconst_1	OP_PUSHB
iconst_2	OP_PUSHB
iconst_3	OP_PUSHB
iconst_4	OP_PUSHB
iconst_5	OP_PUSHB
lconst_0	OP_PUSHL
lconst_1	OP_PUSHL
fconst_0	OP_PUSH
fconst_1	OP_PUSH
fconst_2	OP_PUSH
dconst_0	OP_PUSHL
dconst_1	OP_PUSHL
bipush	OP_PUSHB
sipush	OP_PUSH
ldc	OP_PUSH
ldc_w	OP_PUSH
ldc2_w	OP_PUSHL
iload	OP_LOAD
lload	OP_LOADL
fload	OP_LOAD
d1oad	OP_LOADL
aload	OP_LOAD
iload_0	OP_LOAD
iload_1	OP_LOAD
iload_2	OP_LOAD
iload_3	OP_LOAD
lload_0	OP_LOADL
11oad_1	OP_LOADL
11oad_2	OP_LOADL

lload_3	OP_LOADL
fload_0	OP_LOADL
fload_1	OP_LOAD
fload_2	OP_LOAD
fload_3	OP_LOAD
dload_0	OP_LOADL
d1oad_1	OP_LOADL
dload_2	OP_LOADL
dload_3	OP_LOADL
aload_0	OP_LOAD
aload_l	OP_LOAD
aload_2	OP_LOAD
aload_3	OP_LOAD
iaload	OP_ALOAD
laload	OP_ALOAD
faload	OP_ALOAD
daload	OP_ALOAD
aaload	OP_ALOAD
baload	OP_ALOAD
caload	OP_ALOAD
saload	OP_ALOAD
istore	OP_STOR
lstore	OP_STORL
fstore	OP_STOR
dstore	OP_STORL
astore	OP_STOR
istore_0	OP_STOR
istore_1	OP_STOR
istore_2	OP_STOR
istore_3	OP_STOR
1store_0	OP_STORL
1store_1	OP_STORL
lstore_2	OP_STORL
1store_3	OP_STORL
fstore_0	OP_STOR
fstore_1	OP_STOR

fstore_2	OP_STOR
fstore_3	OP_STOR
dstore_0	OP_STORL
dstore_1	OP_STORL
dstore_2	OP_STORL
dstore_3	OP_STORL
astore_0	OP_STOR
astore_1	OP_STOR
astore_2	OP_STOR
astore_3	OP_STOR
iastore	OP_ASTORE
lastore	OP_ASTOREL
fastore	OP_ASTORE
dastore	OP_ASTOREL
aastore	OP_ASTORE
bastore	OP_ASTORE
castore	OP_ASTORE
sastore	OP_ASTORE
pop	OP_POP
pop2	OP_POP
dup	OP_DUP
dup_x1	OP_DUP
dup_x2	OP_DUP
dup2	OP_DUPL
dup2_x1	OP_DUPL
dup2_x2	OP_DUPL
swap	OP_SWAP
iadd	OP_IADD
ladd	OP_LADD
fadd	OP_FADD
dadd	OP_DADD
isub	OP_ISUB
lsub	OP_LSUB
fsub	OP_FSUB
dsub	OP_DSUB
imul	OP_IMUL

lmul	OP_LMUL
fmul	OP_FMUL
dmul	OP_DMUL
idiv	OP_IDIV
ldiv	OP_LDIV
fdiv	OP_FDIV
ddiv	OP_DDIV
irem	OP_IREM
lrem	OP_LREM
frem	OP_FREM
drem	OP_DREM
ineg	OP_INEG
lneg	OP_LNEG
fneg	OP_FNEG
dneg	OP_DNEG
ishl	OP_ISHL
lshl	OP_LSHL
ishr	OP_ISHR
lshr	OP_LSHR
iushr	OP_IUSHR
lushr	OP_LUSHR
iand	OP_IAND
land	OP_LAND
ior	OP_IOR
lor	OP_LOR
ixor	OP_IXOR
lxor	OP_LXOR
iinc	OP_IINC
i2l	OP_I2L
i2f	IGNORE_OPCODE
i2d	OP_I2D
l2i	OP_L2I
l2f	OP_L2F
l2d	OP_L2D
f2i	IGNORE_OPCODE
f2l	OP_F2L

f2d	OP_F2D
d2i	OP_D2I
d2l	OP_D2L
d2f	OP_D2F
i2b	IGNORE_OPCODE
i2c	IGNORE_OPCODE
i2s	IGNORE_OPCODE
lcmp	OP_LSUB, OP_JMPEQ
fcmpl	OP_FSUB, OP_JMPLE
fcmpg	OP_FSUB, OP_JMPGE
dcmpl	OP_DCMP, OP_JMPLE
dcmpg	OP_DCMP, OP_JMPGE
ifeq	OP_JMPEQ
ifne	OP_JMPNE
iflt	OP_JMPLT
ifge	OP_JMPGE
ifgt	OP_JMPGT
ifle	OP_JMPLE
if icmpeq	OP_ISUB, OP_JMPEQ
if icmpne	OP_ISUB, OP_JMPNE
if icmplt	OP_ISUB, OP_JMPLT
if icmpge	OP_ISUB, OP_JMPGE
if icmpgt	OP_ISUB, OP_JMPGT
if icmple	OP_ISUB, OP_JMPLE
if acmpeq	OP_ISUB, OP_JMPEQ
if acmpne	OP_ISUB, OP_JMPNE
goto	OP_JMP
jsr	OP_JSR
ret	OP_RET
tableswitch	OP_SWITCH
lookupswitch	OP_SWITCH
ireturn	OP_RETURN
lreturn	OP_LRETURN
freturn	OP_RETURN
dreturn	OP_LRETURN
areturn	OP_RETURN

return	OP_RETURNV
getstatic	OP_RESOLVE
putstatic	OP_RESOLVEP
getfield	OP_RESOLVE
putfield	OP_RESOLVEP
invokevirtual	OP_RESOLVE
invokespecial	OP_RESOLVE
invokestatic	OP_RESOLVE
invokeinterface	OP_RESOLVE
xxxunusedxxx	IGNORE_OPCODE
new	OP_NEW
newarray	OP_NEW
anewarray	OP_NEW
arraylength	OP_ARRAYLENGTH
athrow	OP_THROW
checkcast	IGNORE_OPCODE
instanceof	OP_INSTANCEOF
monitorenter	OP_MUTEXINC
monitorexit	OP_MUTEXDEC
wide	OP_WIDE
multianewarray	OP_NEW
ifnull	OP_JMPEQ
ifnonnull	OP_JMPNE
goto_w	OP_JMP
jsr_w	OP_JSR